

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 35

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TOMOMITSU NIWA

Appeal No. 1998-1103
Application No. 08/668,718

ON BRIEF¹

Before HAIRSTON, KRASS, and GROSS, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 8-10, 23 and 24.

Claims 11, 25, 27, 28 and 29 have been allowed.

The invention is directed to a numerically controlled machine tool. More particularly, a miscellaneous command is output to a sequence controller from a numerical controller.

The miscellaneous command is executed without waiting for the

¹ An oral hearing scheduled for September 11, 2001, was abruptly canceled that morning due to the exigencies of the National emergency on that date. Attorneys for appellant were contacted by the Board Administrator and informed that the hearing was being waived in view of the clear reversal of the examiner's decision.

completion of a preceding miscellaneous command if the preceding miscellaneous command need not be completed first. A judging means is provided for determining whether or not the miscellaneous command previously output to the sequence controller has been completed so that the next miscellaneous command may be executed after the preceding miscellaneous command is completed, in the case where the preceding miscellaneous command should be completed prior to execution of the next miscellaneous command.

Representative independent claim 8 is reproduced as follows:

8. A numerically controlled machine tool for machining a workpiece via a programmable controller, responsive to a plurality of commands including miscellaneous commands, in accordance with a machining program, comprising:

recognizing means for recognizing a miscellaneous command from a numerical controller being executed by said programmable controller;

storing means for storing the result of said recognition made by said recognizing means;

judging means for judging whether said miscellaneous command is complete or not according to the contents stored in said storing means;

specifying means for specifying a miscellaneous command which need not be completed before a next command is executed;

checking means for checking whether a previously given miscellaneous command from said numerical controller is being executed or not at a time when a next miscellaneous command from said numerical controller is executed;

means for executing said next miscellaneous command after the previously given miscellaneous command is complete if it is being executed; and

means for executing the next miscellaneous command without waiting for the completion of the miscellaneous command which need not be completed.

The examiner relies on the following references:

Nozawa et al. (Nozawa 998)	4,501,998	Feb. 26, 1985
Nozawa et al. (Nozawa 444)	4,628,444	Dec. 09, 1986
Okada et al. (Okada)	5,128,857	Jul. 07, 1992

Claims 8, 9 and 23 stand rejected under 35 U.S.C. § 102 (b) as anticipated by Okada.

Claims 10 and 24 stand rejected under 35 U.S.C. § 103 as unpatentable over Nozawa 998 in view of Nozawa 444.

Reference is made to the briefs and answer for the respective positions of appellant and the examiner.

OPINION

Regarding claims 8, 9 and 23, it is the examiner's position that Okada anticipates the claimed subject matter in its disclosure of a sequence of operation commands shown in Table 1 (at column 11 of Okada). The examiner contends that the claimed determination of whether a command is complete is taught by the

determination step 17a of Okada; that the specifying means is taught by Okada's interlock condition memory disclosing what commands must be done before the start of the current command; and that the means for executing the next command is taught by Okada's parallel operation of steps depending upon the code in the second column of the sequence. See pages 2-3 of Paper No. 19.

For his part, appellant contends that Okada discloses a system for controlling the internal processing of a sequence controller and not, as in the instant invention, a system for outputting a miscellaneous command to a sequence controller from a numerical controller. Thus, it is appellant's position that Okada fails to teach processing miscellaneous commands between an NC and a programmable controller and fails to teach a system for checking the completion of a miscellaneous command outputted to a sequence controller.

Independent claim 8 does make it clear that the miscellaneous command originates from a numerical controller and is executed by a programmable controller. But the sequence controller of Okada generates operation commands in a predetermined sequence based on instructions from a controller in a machine tool environment. Thus, it would appear that whatever commands are operated upon by Okada's sequence controller would originate from a numerical controller. However, the

question still arises as to whether Okada teaches or suggests checking the completion of a miscellaneous command output to the sequence controller.

The examiner's response to this argument regarding checking the completion of a miscellaneous command output to the sequence controller is to point to column 16 of Okada wherein it states, "...steps S9, S10, S11, S13, S14 and S17 are repeatedly executed until the relevant operation in step S15 is completed...". The examiner then asserts that a command completion is contemplated by Okada and that since internal commands are steps performed in the execution of an external command received by the sequence controller, the detection of completion is "effectively detection of completion of their associated external command" [answer-page 4].

Appellant responds by contending that although Okada may teach a main computer sending a command to a sequence controller, it does not teach the processing of miscellaneous commands between a NC and a PC, "much less the processing of miscellaneous commands having specific controls on the timing of their execution, as defined by the claimed invention" [reply brief-page 2].

While appellant's arguments are not very specific as to upon which claim limitations appellant relies, we will not sustain the examiner's rejection of claims 8, 9 and 23 under 35 U.S.C. § 102(b) because we remain unconvinced by the examiner's

arguments that Okada anticipates the claimed subject matter. The examiner has failed to present a prima facie case of anticipation by failing to clearly show a correspondence between each of the instant claimed elements and that disclosed by Okada. It is more than a matter of Okada operating upon commands that may originate from a numerical controller. Instant claim 8 requires recognizing a miscellaneous command from a numerical controller being executed by the programmable controller, storing the result of that recognition, judging whether the miscellaneous command is complete or not in accordance with the stored contents, specifying a miscellaneous command which need not be completed before a next command is executed, checking whether a previously given miscellaneous command is being executed or not *at a time* when a next miscellaneous command is executed, executing the next miscellaneous command *after* the previously given miscellaneous command is complete *if it is being executed* and executing the next miscellaneous command *without waiting* for the completion of the miscellaneous command which need not be completed.

Thus, the claim has very specific, interrelated times and conditions for execution of various miscellaneous commands and the examiner's generally pointing to various portions of Okada showing a receipt of commands by the sequence controller from a main computer and a repeated execution of steps until a relevant operation started in

step S15 is completed (column 16, lines 62-69 of Okada) is simply not enough to convince us of the anticipatory nature of Okada regarding the subject matter of independent claim 8.

Accordingly, we will not sustain the rejection of claim 8, or of claim 9 or 23, since they stand or fall with claim 8, under 35 U.S.C. § 102(b).

We turn, now, to the rejection of claims 10 and 24 under 35 U.S.C. § 103 over the two Nozawa references. We will also reverse this rejection.

It is the examiner's position that Nozawa 998 teaches a means for disabling a command by determining if there is a slash (/) and numeral at the beginning of a command, and comparing the numeral to a numeral set by the user through a block select switch. If they match, the command is skipped. However, as the examiner recognizes, Nozawa 998 does not employ a skip function within a test mode. Claims 10 and 24 explicitly require "means for disabling, only during said test mode, a specified miscellaneous command from being executed." Thus, the examiner turns to Nozawa 444 for a disclosure of a block skip scheme to be employed during a "dry run." The examiner concludes that the combination of these references teaches a system for selectively disabling commands, only during a test mode.

We agree with the examiner that a “dry run” may be considered a “test mode” since a “dry run,” even by appellant’s definition, would be “a simulated or practice performance” [reply brief-page 4]. A “practice performance” is reasonably interpreted as a test mode.

However, we part ways with the examiner when the examiner states that a “dry run” would have been recognized by skilled artisans as a “process in which not all of the functions performed in a complete run are performed; some functions are ‘skipped’ over. A ‘dry run’ is merely a form of block skipping.” [answer-page 5]. We find the examiner’s interpretation to be unreasonable and unsupported by any evidence of record. Since Nozawa 444 does not define a “dry run,” it is reasonable to presume that such a term would include its usual meaning. That is, to make a “dry run” would mean to make a first, experimental, or test, run, with all operations functional, in order to determine if all operations are functioning as expected. Therefore, there would appear to be no need to skip any functions in a “dry run” and thus no block skipping would be indicated in such a “dry run.” In fact, we tend to agree with appellant that if Nozawa 444 intended for the “dry run” to mean skipping some blocks, there would appear to be no need for Nozawa 444 to have a separate “block skip” function.

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We have not sustained the rejection of claims 8, 9 and 23 under 35 U.S.C.
§ 102(b) nor have we sustained the rejection of claims 10 and 24 under 35 U.S.C.
§ 103.

Accordingly, the examiner's decision is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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